

# CONTRACT MANUFACTURING

## Moderator's Comments

### Dr. Joseph G. Wirth

The subject of this morning's session is Contract Manufacturing. While this has always been a part of operations, its importance over the last two decades has increased enormously. The Electronic Manufacturing Sector alone will be \$130-150 billion this year with growth at 26-28% per year. Companies large and small in different industries use contract manufacturing. Contract manufacturers, themselves, are diverse in size and capabilities. One example, Solecron, which you will hear more about shortly, had sales of just over \$14 billion in their fiscal year 2000 with an average annual growth rate of 45% from 1996 to 2000.

If your business is in computer peripherals, you could choose to have your product manufactured by a company like TVS Electronics in India thus eliminating the need for capital investment and accessing low cost labor in Asia. If your business is telecommunications equipment, you might choose to take advantage of specialized existing capital investment by having your product made by Solecron or a smaller more specialized firm like your business is pharmaceuticals and you wish to introduce a specialty IV-administered product, you could use Pharmaceuticals which specializes in manufacture of such low volume products. Some other examples of specialized manufacturing expertise are: Target Corporation for military electronics hardware with a resident government Assurance Representative; Riva International for textile-based products with a mequilladoro in Mexico and the ability to drop-ship your products to customers anywhere in the world; and Regal Research and Manufacturing with metal cutting, machining, joining and painting capabilities. The list of industries served by contract manufacturing is indeed long and varied.

Primary driving forces for this explosion of contract manufacturing include globalization of business and new technology. Successful global businesses must be globally competitive in their costs, product offerings, speed to market, quality and customer service. Contract manufacturers can reduce costs and speed time to market by eliminating the need for major capital investments and the time for design, construction and startup of new facilities, providing access to low cost labor and flexibility for a company to discontinue unprofitable or obsolete products. Specialized manufacturing expertise of a contract manufacturer can allow a company to introduce products beyond its present scope of offerings without taking the time and spending the money to acquire and develop the necessary manufacturing expertise themselves. New technology has made it possible to streamline manufacturing operations, reduce labor content; however, capital investment and expertise are essential. Use of a contract manufacturer allows a business to take advantage of world-class technology without doing everything on their own. Many new businesses, some successful and many not, have arisen from the capabilities offered by the Internet. All of them require some flexibility – access to world-class manufacturing through a contract manufacturer can be a significant part of the equation.

This morning four speakers will share their views and experiences of contract manufacturing with you and you will have the opportunity to ask questions and perhaps share your views on this subject:

Dr. Vincent DePalma is the Corporate Vice President of Technology and New Product Introduction for Solecron Corporation. His organization provides functional guidance to the process, equipment, design, test and NPI development processes for the seventy Solecron manufacturing and NPI facilities.

Mr. Jerry H. Labowitz is from Merrill Lynch where he is 1<sup>st</sup> Vice President. In that capacity he heads a five person group that covers Electronics Manufacturing Services and a number of other electrical and electronic business areas joined by Mr. Brian White who co-covers the EMS industry with Jerry.

Mr. Michael Reardon is Commercial Development Manager for Dow Chemical in Contract Manufacturing Services organization provides innovative solutions to customers' specific chemical manufacturing, synthesis and process development needs in a variety of industries most notably pharmaceutical, agro chemical, household and personal care and chemical processing..